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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/536,616	05/26/2005	Piotr Jedrzejewski	P16590-US1	7102
27045	7590	11/07/2006	EXAMINER	
ERICSSON INC. 6300 LEGACY DRIVE M/S EVR C11 PLANO, TX 75024			GLENN, KIMBERLY E	
			ART UNIT	PAPER NUMBER
			2817	

DATE MAILED: 11/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/536,616

Applicant(s)

JEDRZEJEWSKI ET AL.

Examiner

Kimberly E. Glenn

Art Unit

2817

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 26 May 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 16-29 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 16-29 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on 26 May 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>5/26/05</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Information Disclosure Statement***

The information disclosure statement filed 5/26/05 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each cited foreign patent document; each non-patent literature publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. It has been placed in the application file, but the information referred to therein has not been considered.

### ***Specification***

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

### ***Drawings***

Figures 1 and 3 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 17-23 and 27-29 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

With regard to claims 17, 21-23, the independent claim discloses subdividing the tuner element into a number of sections. Are the sections recited in the above claims a part of the sections recited in claim 16?

With regard to claims 28 and 29, claim 27 discloses subdividing the resonator into a number of sections. Are the sections recited in the above claims, a part of the sections recited in claim 27?

Claims 17 and 27 recite the limitation "the value" in line 2 of claim 17 and line 4 of claim 27. There is insufficient antecedent basis for this limitation in the claim.

Claims 18 and 19 recite the limitation "the effective tuning area" in line 1 of each of the claims. There is insufficient antecedent basis for this limitation in the claim.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 16, 18, 24 and 25 are rejected under 35 U.S.C. 102(b) as being anticipated by Särkkä US Patent 5,712,606.

Särkkä disclose a dielectric resonator comprising adjustment element wherein the adjustment element comprises adjustment bodies 32 and 33. The adjustment

bodies each have a non-uniform geometric shape. Inherently, since the adjustment bodies have non-uniform shape the distribution of dielectric constant will be non-uniform along the length of the adjustment bodies. The resonance frequency varies as a non-linear function of the adjustment distance. The adjustment bodies vary along an axis of adjustment element displacement. The adjustment body 33 has a hollow section wherein the other adjustment body 32 and the adjustment mechanism are attached. The effective tuning area is within a hollowness of the resonator 35. The axis of adjustment element displacement is arranged centrally through the resonator hollowness.

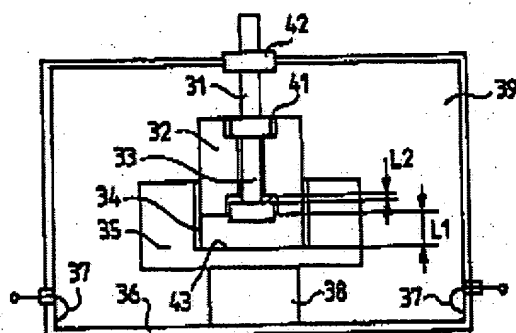


FIG. 3

Claims 16, 17, 18, 24 are 25 are rejected under 35 U.S.C. 102(b) as being anticipated by Ishikawa et al US Patent 5,049,842.

Ishikawa et al disclose a dielectric resonator comprising tuning mechanism comprising tuning unit (18) and supporting axis (20). The tuning unit has a non-uniform shape. The tuning unit has a high dielectric constant while the support axis as a low dielectric constant. Inherently, since the tuning unit has a non-uniform shape the distribution of dielectric constant will be non-uniform along the length of the tuning unit.

The tuning element varies along an axis of the supporting axis. The tuning unit has a hollow section wherein supporting axis is attached. The effective tuning area is within a hollowness 16a of the resonator 16. The axis of support axis is arranged centrally through the resonator hollowness.

FIG. 1B

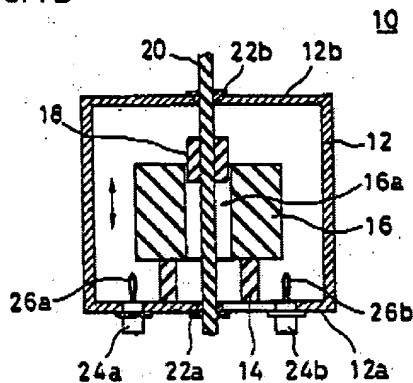


FIG. 2

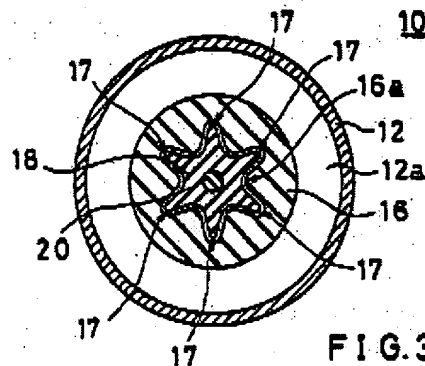


FIG. 3

Claims 16 and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by Terashima et al US Patent 6,778,042

Terashima et al disclose high frequency device comprising resonating elements 12 and a tuning mechanism comprising dielectric plate 16, a metal holding jig 21 and lift jig 23. The dielectric plate, the metal holding jig and the lift jig have geometric shape. The metal holding jig and the lift jig will have dielectric constant different from the dielectric constant of the dielectric plate. The effective tuning area is outside the resonating elements.

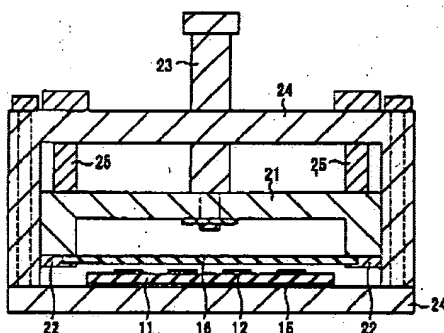
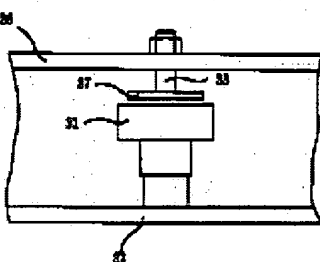


FIG. 12

Claim 26 is rejected under 35 U.S.C. 102(b) as being anticipated by Shu et al US Patent 6,262,639

Shu et al disclose a band pass filter comprising resonators 31 and a tuning mechanism comprising control plate 37 and tuning bar 38. The dielectric resonator has a stepped shape. Therefore, the distribution of dielectric constant is non-uniform along the axis of the tuning mechanism.

FIG. 4B



Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kimberly E. Glenn whose telephone number is (571)-272-1761. The examiner can normally be reached on Monday-Friday 7:30 to 4:00.

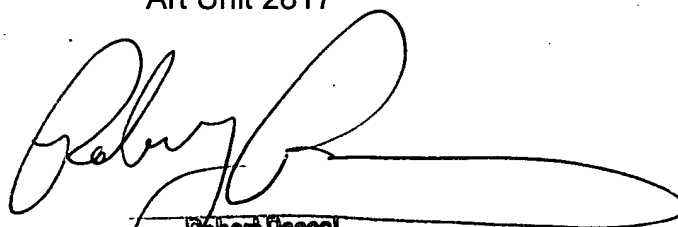
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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Pascal can be reached on (571)-272-1769. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Kimberly E Glenn  
Examiner  
Art Unit 2817

20061102



**Robert Pascal**  
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